





## **Department of biology**

((Parasites))

2 stage

Lab 3

Leishmania

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#### Leishmania

Leishmania is a parasitic protozoan, a single-celled organism of the genus Leishmania that is responsible for the disease leishmaniasis They are spread by sandflies At least 93 sandfly species are proven or probable vectors worldwide. Their primary hosts are vertebrates; Leishmania commonly infects, canids, rodents, and humans.

There are 3 main forms of leishmaniases: visceral (the most serious form because it is almost always fatal without treatment), cutaneous (the most common, usually causing skin ulcers), and mucocutaneous (affecting mouth, nose and throat)

Scientific classification

Domain: Eukaryota

Phylum: Protozoa

Class: Kinetoplastea

Order: Trypanosomatida

Genus: Leishmania



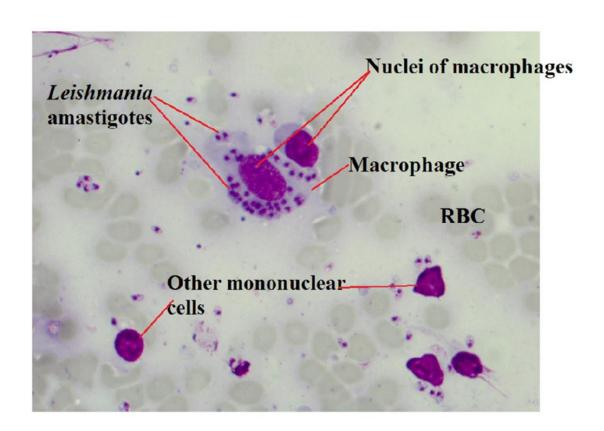


Leishmania parasites have a complex life cycle that involves both vertebrate and invertebrate hosts and two developmental stages: promastigotes, the proliferative form found in the lumen of the female sandfly, and amastigotes, the proliferative form found inside several types of mammalian host cells.

#### Leishmania have tow stage

\*Promastigote

\*Amastigote







### Leishmania

